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EXAMINER

TRUONG, THANHNGA B

ART UNIT

PAPER NUMBER

2438

MAIL DATE

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12/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/824,273	Applicant(s) HALL, ARON	
	Examiner THANHNGA B. TRUONG	Art Unit 2438	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 29-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 29-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments filed on September 4, 2009 has been entered. Claims 1-25 and 29-31 are pending. Claim 26-28 is canceled by the applicant. At this time, claims 1-25 and 29-31 are rejected.

Response to Arguments

2. Applicant's arguments filed September 4, 2009, under claim objection, have been fully considered, and they are persuasive.

Applicant's arguments filed September 4, 2009, under 35 USC 101, have been fully considered, but they are not persuasive.

As mentioned in the previous office action, although claim 22 has "storage" language, it does not prove to be statutory, since this term "computer-readable storage medium" does not support anywhere in the specification, which could construe as new matter. Therefore, claim 22 is still found non-statutory. In addition, the specification still recites **a propagated signal** (see paragraph [0012] of page 4 of specification), wherein the computer program product could be embodied and transferred via a propagated signal. Therefore, the 101 rejection is still maintained.

Claims 23-27 are dependent on claim 22, thus they are rejected with the same rationale applied against claim 22 above.

Claims 10 and 16 are also non-statutory. While these claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. § 101 must (1) be tied to a particular machine, or (2) transform underlying subject matter (such as an article or material) to a different state or thing. See page 10 of *In Re Bilski* 88 USPQ2d 1385. Specifically, claim 10 recites "a network security method comprising: determining one or more quantities... calculating security protection....", but nowhere in the claim does it state what particular apparatus does (or is positively tied with) these series of steps. Because the instant claim is neither positively tied to a particular machine that accomplishes the claimed method steps nor transforms underlying subject matter of the claim to a different state or thing, the claim therefore does not qualify as a statutory process under 35 U.S.C. § 101.

As to dependent claims 11-15 and 17-21, they are rejected under 35 U.S.C. § 101 for depending upon the non-statutory subject matter recited by independent claim 10 and 16, respectively.

Applicant's arguments filed September 4, 2009, under 35 USC 112, have been fully considered, but they are not persuasive.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim limitations in claim 16 uses the phrase "means for" or "step for", but it is modified by some structure, material, or acts recited in the claim. It is unclear whether the recited structure, material, or acts are sufficient for performing the claimed function which would preclude application of 35 U.S.C. 112, sixth paragraph, because it is unclear whether the recited structure is sufficient for performing the claimed function. In this situation, it is unclear the recited structure in the claim would preclude application of 112, 6th (failing the 3rd prong of the analysis).

If applicant wishes to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant is required to amend the claim so that the phrase "means for" or "step for" is clearly not modified by sufficient structure, material, or acts for performing the claimed function.

If applicant does not wish to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant is required to amend the claim so that it will clearly not be a means (or step) plus function limitation (e.g., deleting the phrase "means for" or "step for").

Applicant's arguments filed September 4, 2009, under 35 USC 102 and 103, have been fully considered, but they are not persuasive.

Applicant argues that:

Applicants are unable to locate in that portion of Liang, any mention of "quantifying" - e.g., "determining one or more quantities" of- damages avoided as

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recited in independent Claims 1, 10, 16, and 22. Instead, that portion of Liang appears to recite a process for determining whether a virus is present by examining modified files.

Examiner respectfully disagrees with the applicant and still maintains that:

Liang's Figure 4 and 5 disclose the determining step of 1402 and 1502 showing a possible file has been modified or damage. In addition, Liang's system and method for effectively managing damage caused by a computer virus epidemic in a network environment by effectively and rapidly distributing antivirus protection and **cure measures within the network so as to optimally reduce the level of damage during the virus epidemic** (emphasis added) (column 2, lines 28-33 of Liang). Furthermore, Liang teaches a further embodiment according to the invention for finding a virus is by searching the modification sections in files of the network system. Initially, the system finds a modified file in a predetermined time interval. The system then determines a first plurality of modified sections of the modified file. The system finds a second modified file in the predetermined time interval. Next, the system determines a second plurality of modified sections in the second file. The system compares the first modified file against the second modified file. The process is repeated for other files being modified in the predetermined time period. The management server receives info on the conditions of the virus infection. If no virus is found, i.e., all the modified sections from different modified files are not identical nor similar, then the process comes to the end. Otherwise, the management server is informed that there is possibly attack a virus is when modified sections from different modified files are identical or similar. The system accordingly quarantine an area containing device nodes having files with the modified sections. Finally, the system transfers an antivirus task into said the quarantine area for finding and eradicating the virus (column 2, line 66 through column 3, line 19 of Liang). Therefore, Liang, alone, could anticipate the newly amended limitation of claim 1.

The fact that Examiner may not have specifically responded to any particular arguments made by Applicant and Applicant's Representative, should not be construed as indicating Examiner's agreement therewith.

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For the above reasons, it is believed that the rejections should be sustained.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 29-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 29 recites the language "determining a monetary value associated with the damages avoided." These languages of "determining a monetary value" does not support by the specification. Appropriate correction is required.

Claim 30 recites the language "determining a first portion of damages...." These languages of "determining a first portion" does not support by the specification. Appropriate correction is required.

Claim 31 recites the language "determining a count of the one ore more blocked attacks." These languages of "determining a count" does not support by the specification. Appropriate correction is required.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 16 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See

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MPEP § 2172.01. The omitted structural cooperative relationships are: component or unit or module wherein claim element is a means (or step) plus function that invokes 35 U.S.C. 112, sixth paragraph. However, written description fails to clearly link or associate the disclosed structure, material, or acts to the claimed function such that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed invention. Thus, these essential missing component or unit or module is important and necessary to connect its relationship with the step of processing. Appropriate correction is required.

Claims 17-21 have limitation that are similar to those of claim 16, thus it is rejected with the same rationale applied against claim 16 above.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 10-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

a. Referring to claim 22:

Claim 22 recites “a computer program embodied in a computer-readable storage medium, and comprising computer instructions for: quantifying damages avoided by one or more blocked attacks; and calculating security protection consumption during a period of time.” It appears that any digital or analog signal can be transmitted to recordable type media to be stored thereon which direct the claims signal per se, therefore, claim 22 is non-statutory. In addition, the claim is clearly a software program and it is non-statutory as not being tangibly embodied in a manner so as to be executable. Furthermore, applicant has pointed out in the specification (paragraph [0012] of page 4) that the computer readable medium may comprise a disk, a device, **and/or a propagated signal**, which clearly including intangible media such as signals, carrier waves, transmissions, optical waves, transmission media or other media incapable of being touched or perceived absent the tangible medium through which they

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are conveyed. Therefore, claim 22 recites a non-statutory subject matter. Appropriate correction required. See MPEP 2106.

Claims 23-27 are depended on claim 22, thus they are rejected with the same rationale applied against claim 22 above.

b. Referring to claim 10:

i. This claim has limitations that is similar to those of claim 22, thus it is rejected with the same rationale applied against claim 22 above.

Claims 11-15 are depended on claim 10, thus they are rejected with the same rationale applied against claim 10 above.

c. Referring to claim 16:

i. This claim has limitations that is similar to those of claim 22, thus it is rejected with the same rationale applied against claim 22 above.

Claims 17-21 are depended on claim 16, thus they are rejected with the same rationale applied against claim 16 above.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Liang (US 7,062,553 B2).

a. Referring to claim 1:

i. Liang teaches a system comprising:

(1) a processor (**column 4, line 29 of Liang**); and a memory, coupled to the processor, wherein the memory is configured to provide the processor with instructions (**column 8, lines 38-44 of Liang**) which when executed cause the processor to: determining one or more quantities of damages avoided by one or more blocked attacks (**see Figure 4, element 1402 and Figure 5, element 1502; column 2, line 66 through column 3, line 19; and column 7, line 66 through column 8, line 4 of Liang**); and calculate security protection consumption during a period of time (**see abstract; column 2, lines 34-44; column 11, lines 7-20 of Liang**).

b. Referring to claim 2:

i. Liang further teaches:

(1) wherein determining one or more quantities damages includes determining whether a blocked attack would have exploited a network vulnerability (**see Figure 4, element 1402 and Figure 5, element 1502; column 9, lines 1-11 of Liang**).

c. Referring to claim 3:

i. Liang further teaches:

(1) wherein determining whether a blocked attack would have exploited network vulnerability includes replaying the attack on an internal network (e.g., LAN) (**column 9, lines 1-11 of Liang**).

d. Referring to claim 4:

i. Liang further teaches:

(1) further comprising a scanner configured to scan one or more devices for vulnerabilities (**column 10, lines 22-31 and 51-63 of Liang**).

e. Referring to claim 5:

i. Liang further teaches:

(1) wherein the scanner is configured to quantify the risk of one or more devices (**column 11, lines 7-20 of Liang**).

f. Referring to claim 6:

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i. Liang further teaches:

(1) wherein the scanner is located within a customer network **(column 10, lines 51-63 of Liang)**.

g. Referring to claim 7:

i. Liang further teaches:

(1) further comprising an intrusion suppression module configured to block attacks **(column 2, lines 40-44; column 7, line 66 through column 8, line 2 of Liang)**.

h. Referring to claim 8:

i. Liang further teaches:

(1) wherein the intrusion suppression module is configured to maintain a list of attacks sustained and blocked during a period of time **(column 6, lines 56-67; column 2, lines 34-44; column 11, lines 7-20 of Liang)**.

i. Referring to claim 9:

i. Liang further teaches:

1) wherein the intrusion suppression module is located outside (e.g., remote location) a customer network **(column 9, lines 5-7 of Liang)**.

j. Referring to claims 10-15:

i. These claims consist a network security method to implement from the network security apparatus of claim 1, thus they are rejected with the same rationale applied against claims 1-9 above.

k. Referring to claims 16-21:

i. These claims have limitations that are similar to those of claims 1-9, thus they are rejected with the same rationale applied against claims 1-9 above.

l. Referring to claims 22-27:

i. These claims consist a computer program stored on a computer-readable storage medium to implement by the network security method of

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claim 10 from the system of claim 1, thus they are rejected with the same rationale applied against claims 1-9 above.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liang (US 7,062,553 B2), and further in view of Colson et al (US 2003/0128229).

a. Referring to claim 1:

i. Liang teaches a system comprising:

(1) a processor (column 4, line 29; column of Liang); and a memory, coupled to the processor, wherein the memory is configured to provide the processor with instructions (**column 8, lines 38-44 of Liang**) which when executed cause the processor to: determining one or more quantities of damages avoided by one or more blocked attacks (**see Figure 4, element 1402 and Figure 5, element 1502; column 2, line 66 through column 3, line 19 of Liang**); and calculate security protection consumption during a period of time (**see abstract; column 2, lines 34-44; column 11, lines 7-20 of Liang**).

ii. Although Liang teach the processor, memory as shown in column 8, lines 38-44, Liang does not clearly mention that memory is coupled or associated with CPU or processor to execute the program task (if indeed is not inherently). However, Gupta clearly teaches this limitation in Figure 3 and more detail on column 4, lines 7-13 of Gupta.

iii. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(1) modified the invention of Liang (if indeed is not inherently) with the teaching of Gupta to execute the program for antivirus control in a network system and, more particularly, damage control against virus outbreak in a network environment with a plurality of device nodes under malicious code attack (column 1, lines 15-18 of Liang).

iv. The ordinary skilled person would have been motivated to:

(1) modified the invention of Liang (if indeed is not inherently) with the teaching of Gupta for effectively executing the program for managing damage caused by a computer virus epidemic in a network environment by effectively and rapidly distributing antivirus protection and cure measures within the network so as to optimally reduce the level of damage during the virus epidemic (column 2, lines 29-33 of Liang).

b. Referring to claim 2:

i. Liang further teaches:

(1) wherein determining one or more quantities damages includes determining whether a blocked attack would have exploited a network vulnerability (**see Figure 4, element 1402 and Figure 5, element 1502; column 9, lines 1-11 of Liang**).

c. Referring to claim 3:

i. Liang further teaches:

(1) wherein determining whether a blocked attack would have exploited network vulnerability includes replaying the attack on an internal network (e.g., LAN) (**column 9, lines 1-11 of Liang**).

d. Referring to claim 4:

i. Liang further teaches:

(1) further comprising a scanner configured to scan one or more devices for vulnerabilities (**column 10, lines 22-31 and 51-63 of Liang**).

e. Referring to claim 5:

- i. Liang further teaches:
 - (1) wherein the scanner is configured to quantify the risk of one or more devices (**column 11, lines 7-20 of Liang**).
- f. Referring to claim 6:
 - i. Liang further teaches:
 - (1) wherein the scanner is located within a customer network (**column 10, lines 51-63 of Liang**).
- g. Referring to claim 7:
 - i. Liang further teaches:
 - (1) further comprising an intrusion suppression module configured to block attacks (**column 2, lines 40-44; column 7, line 66 through column 8, line 2 of Liang**).
- h. Referring to claim 8:
 - i. Liang further teaches:
 - (1) wherein the intrusion suppression module is configured to maintain a list of attacks sustained and blocked during a period of time (**column 6, lines 56-67; column 2, lines 34-44; column 11, lines 7-20 of Liang**).
- i. Referring to claim 9:
 - i. Liang further teaches:
 - 1) wherein the intrusion suppression module is located outside (e.g., remote location) a customer network (**column 9, lines 5-7 of Liang**).

Conclusion

13 Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and

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any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanhnga (Tanya) Truong whose telephone number is 571-272-3858.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached at 571-272-3787. The fax and phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

/Thanhnga B. Truong/

Primary Examiner, Art Unit 2438

TBT

December 19, 2009

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